

PENDING CLAIMS

The following is a list of currently pending claims. Please amend claims 1, 3, and 19 as shown below.

1. (Currently amended) An apparatus comprising:
a first base; and
a first module; and
a plurality of modules,
the first module and each of the plurality of modules each having an identity,
said base, and first module, and plurality of modules comprising circuitry
wherein:
when a the first module is directly attached to the first base, and an arbitrary
number of the plurality of modules of the plurality of modules are is
indirectly attached to the first base through the first module, ~~directly or~~
~~indirectly, to the first module,~~ the circuitry determines an order and the
identities of all attached modules.
2. (Original) The apparatus of claim 1 wherein the arbitrary number is greater than one.
3. (Currently amended) The apparatus of claim 2 wherein any module of the plurality of
modules can be attached to: the first base, or one other module, or the first base and
one other module, or two other modules, ~~or the first base and a second base.~~
4. (Original) The apparatus of claim 1 wherein only one module can be directly attached
to the first base at a time.
5. (Original) The apparatus of claim 1 wherein more than one module can be directly
attached to the first base at a time.

6. (Original) The apparatus of claim 1 wherein the identity of each module is stored within that module.
7. (Original) The apparatus of claim 6 wherein the identity of at least one module is stored by analog means.
8. (Original) The apparatus of claim 7 wherein the analog means of storing the identity of at least one module comprises a resistor.
9. (Original) The apparatus of claim 6 wherein the identity of at least one module is stored by digital means.
10. (Previously amended) The apparatus of claim 9 wherein the digital means of storing the identity of at least one module comprises jumpers or switches.
11. (Previously amended) The apparatus of claim 9 wherein the digital means of storing the identity of at least one module comprises a memory device.
12. (Original) The apparatus of claim 6 wherein the identity of at least one module corresponds to a letter.
13. (Original) The apparatus of claim 6 wherein the identity of at least one module corresponds to a number.
14. (Original) The apparatus of claim 6 wherein the identity of at least one module corresponds to an image.
15. (Original) The apparatus of claim 6 wherein the identity of at least one module corresponds to a word.

16. (Original) The apparatus of claim 6 wherein the identity of at least one module corresponds to a color.
17. (Original) The apparatus of claim 6 wherein the identity of at least one module corresponds to a sound.
18. (Original) The apparatus of claim 17 wherein the identity of at least one module corresponds to a musical tone.
19. (Currently amended) An apparatus comprising:
- a first base;
 - a plurality of modules, each having an identity and being directly attachable to the first base or other modules; and
 - circuitry, wherein the circuitry determines an order and the identities of all contiguously attached modules when a first module of the plurality of modules ~~one of the modules~~ is attached to the first base, and at least a second module is attached directly to the first module.
20. (Original) The apparatus of claim 19, wherein the first base and the modules comprise the circuitry.
21. (Original) The apparatus of claim 20, wherein the identity of a module is stored by analog means.
22. (Original) The apparatus of claim 21, wherein the analog means comprise a resistor within the module.
23. (Original) The apparatus of claim 20, wherein the identity of a module is stored by digital means.

24. (Original) The apparatus of claim 23, wherein the digital means comprise jumpers or switches.
25. (Original) The apparatus of claim 23, wherein the digital means comprise a memory device.
26. (Withdrawn) A method of identifying order and number of modules in a sequence of modules attached to a base, each module having an identity, the method comprising: the base initiating an identification sequence; and each module providing its identity, wherein only one module of the sequence is directly attached to the base.
27. (Withdrawn) The method of claim 26 wherein:
- the step of the base initiating an identification sequence comprises the base activating a first module, causing it to become the active module; and
 - the step of each module providing its identity comprises:
 - a. the active module identifying itself; and,
 - b. for each remaining module of the train until the end of the string: the active module activating its following module, making itself inactive and making the following module become the active module; and
 - the active module identifying itself
28. (Withdrawn) The method of claim 27 wherein the step of a module providing its identity comprises using analog means.
29. (Withdrawn) The method of claim 28 wherein the analog means comprise a resistor.
30. (Withdrawn) The method of claim 27 wherein the active module turns on a light within the module while it is the active module.

31. (Withdrawn) The method of claim 26 wherein: the sequence of modules comprises a shift register chain, and the step of each module providing its identity comprises loading its identity into the shift register chain.
32. (Withdrawn) The method of claim 31, wherein the method further comprises, after the step of each module providing its identity, the module identities in the shift register chain being shifted into the base.
33. (Withdrawn) The method of claim 32, wherein the identity of at least one module is stored in jumpers or switches.
34. (Withdrawn) The method of claim 33, wherein the identity of at least one module is stored in a memory device.
35. (Withdrawn) The method of claim 27 wherein the step of a module providing its identity comprises using digital means.
36. (Withdrawn) The method of claim 27 wherein at least one module provides other digital information along with its identity.

CLAIM AMENDMENTS: DISCUSSION

Claim 1 has been amended to recite an apparatus comprising: a first base; a first module; and a plurality of modules, the first module and each of the plurality of modules having an identity, said base, and first module, and plurality of modules comprising circuitry wherein: when the first module is directly attached to the first base, and an arbitrary number of the plurality of modules is indirectly attached to the first base through the first module, the circuitry determines an order and the identities of all attached modules. Support for this amendment is found throughout the application, for example in Figs. 1a through 1c and Fig. 2.

Claim 3 has been amended to recite the apparatus of claim 2 wherein any module of the plurality of modules can be attached to: the first base, or one other module, or the first base and one other module, or two other modules.

Claim 19 has been amended to recite an apparatus comprising: a first base; a plurality of modules, each having an identity and being directly attachable to the first base or other modules; and circuitry, wherein the circuitry determines an order and the identities of all contiguously attached modules when a first module of the plurality of modules is attached to the first base, and at least a second module is attached directly to the first module. Support for this amendment is found throughout the application, for example in Figs. 1a through 1c and Fig. 2.

None of these amendments constitutes new matter.